AMENDMENTS TO THE DRAWINGS:

In the Office Action at item 1, the Examiner objected to the drawings. In order to overcome these objections, Replacement Figures 5 and 6 are submitted herewith. Figures 5 and 6 have been designated "Prior Art." Approval of these changes to the Drawings is respectfully requested.

REMARKS

In the Office Action the Examiner noted that claims 1-3 were pending in the application and the Examiner rejected all claims. By this Amendment, new claim 8 has been added. Thus, claims 1-3 and 8 are pending in the application. The Examiner's rejections are traversed below.

The Drawings

Figures 5 and 6 have been labeled "Prior Art" in accordance with the Examiner's request in item 1 on page 2 of the Office Action.

The Rejection

In item 3 on page 3 of the Office Action the Examiner rejected claims 1-3 as unpatentable over U.S. Patent 4,403,162 to Pallaro in view of Japanese Patent Publication 54-132701 to Takashi.

The Present Invention

The present invention as set forth, for example, in claim 1, is directed to an electric motor which includes a stator core having slots and coils arranged along the slots of the stator core to form coil edges projecting from ends of the stator core. Insulation sheets insulate proximal portions of the coil edges. Each of the insulation sheets has a folded portion for folding one or more coils of the same phase and inserting portions inserted into the slot or slots of the stator core to be fixed by drawing distal ends thereof from inside of the stator core.

The Prior Art

The Pallaro Reference

The Pallaro reference is directed to an insulating element for electric motor windings. Referring to Figures 1-3, motor windings are separated by insulating elements of die-cut sheet material 26. Each element 26 includes a pair of end panels 28 and 30 interconnected by a series of a parallel strips 32. The strips 32 are intended to extend within the slots 14 of the armature 10 to separate the active parts of the two windings and the end panels 28 and 30 are intended to separate the end portions of the windings. An insulated sleeve 34 is integrally

formed with the element 36 on the end panel 28. The sleeve receives one of the joints constituted by one of the cable clips 20 (see column 2, line 57 to column 3, line 13).

The Takashi Reference

The Takashi reference discloses use of a band state insulator to insulate a coil end part. Band state insulator 24 is inserted along all of the circumference of the coil end part 22 and is fixed by binding yarn 25 together with the coil, insulator 23 with legs 231 which are inserted in the slot at the part on which each phase coil is contacted in the neighborhood of an outlet of the slot.

The undersigned has been advised that lines 1-10 of the lower right column of page 2 of the Takashi reference are translated as follows:

> This insulator 23, as shown in Fig. 3 comprises legs 231 for insertion into stator core slots 21S and a body part 232. The body part 232 has an area capable of covering a contacting region of a plurality of different phase coils, and the number of the insertion legs 231 extending from the body part is two or three in general, which is two in this embodiment. Further, the length ℓ of the body part 232 along a circumferential direction of the stator core corresponds to 3 to 6 pitches of stator core slots, which corresponds to 3 pitches of the stator core slots in this embodiment.

Thus, Takahashi shows an insulator 23 having legs 231 in Fig. 3C, but the legs 231 are provided to be simply inserted into the slots 21S of the stator core 21. There is no teaching or suggestion that teach of the insulation sheets has inserting portions inserted in the slot or slots of the stator core to be fixed by drawing distal ends thereof from inside of the stator core.

The Present Claimed Invention Patentably Distinguishes Over the Prior Art

Claim 1, as amended specifies an electric motor which includes:

> insulation sheets for insulating proximal portions of the coil edges, each of said insulation sheets having a folding portion for folding one or more coils of the same phase and inserting portions

> inserted into the slot or slots of said stator core to be fixed by drawing distal ends thereof from inside of said stator core.

It is submitted that these features are not taught or suggested by the prior art. Contrary to the Examiner's assertion, applicants are unable to locate any disclosure in Takashi of drawing distal ends from inside of the stator core. It is also submitted that one of ordinary skill would not have been led to combine the teachings of Pallaro and Takashi. In particular, in Pallaro, parallel strips 32 extend within slots 14 of the armature 10 to separate the active parts of windings. Therefore, it is submitted that one of ordinary skill would not have been led to attach additional distal ends to the insulator in Pallaro as suggested by Pallaro. It is also submitted that the Examiner's line of reasoning (set forth below) for combining the teachings of Pallaro and Takashi is insufficient:

> Doing so would make insulation to be sure and improve the reliability of electric motor. (Page 3 of Office Action.)

It is submitted that this line of reasoning comes only from the subject application and not from the prior art. Therefore it is submitted that the Examiner's rejection is improper and should be withdrawn.

For the above reasons, it is submitted that claim 1 patentably distinguishes over the prior art.

Claims 2 is directed to an electric motor which includes:

> insulation sheets for insulating proximal portions of the coil edges, each of said insulation sheets having a folding portion for folding one or more coils of the same phase and two inserting portions extending from the folding portion so that respective distal ends are positioned away from a centerline of the folding portion, wherein the coils of the same phase are folded by the folding portions of said insulation sheets, and the inserting portions are inserted into the slots of said stator core by drawing the distal ends thereof from inside of said stator core to thereby insulate the coils of the same phase from coils of different phases.

Therefore, it is submitted that claim 2 patentably distinguishes over the prior art.

Claim 3 depends from claim 1 and includes all of the features of that claim plus additional features which are not taught or suggested by the prior art. Therefore, it is submitted that claim 3 patentably distinguishes over the prior art.

New Claim 8

New claim 8 is directed to an electric motor which includes:

> insulators insulating proximal portions of the coil edges, each of said insulators folded around one or more coils, said insulators having inserting portions inserted into at least one slot of said stator core to be fixed by drawing distal ends thereof from inside of said stator core.

Therefore, it is submitted that claim 8 patentably distinguishes over the prior art.

Summary

It is submitted that none of the references either taken alone or in combination, teach the present claimed invention. Thus, claims 1-3 and 8 are deemed to be in a condition for allowance. Reconsideration of the claims and an early notice of allowance are earnestly solicited.

Respectfully submitted,

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Date: 4-27-05

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